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Docket H10125JDP
Customer No. 01333

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

David R. Hansen

METHODS FOR DIGITALLY
PRINTING COMPOSITE
DOCUMENTS

Serial No. 09/729,302

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Group Art Unit: 2625

Examiner: James A. Thompson

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Sir:

APPELLANT'S REPLY BRIEF

Status Of The Claims

Claims 1-39 stand canceled from consideration pursuant to the response mailed May 26, 2004.

Claims 40-63 stand finally rejected and are the subject of this reply.

Grounds of Rejection to be Reviewed on Appeal

The grounds of rejection for review are:

(1) the rejection of claims 40, 42-43, 46, 48-50, 52, 54-55, 58 and 60-62 as being obvious under 35 U.S.C. §103(a) over Motoyama (U.S. Patent No. 5,353,388) in view of Hanson (U.S. Patent No. 5,956,736).

(2) the rejection of claims 41, 44, 47, 53, 56 and 59 as being obvious under 35 U.S.C. §103(a) over Motoyama (U.S. Patent No. 5,353,388) in view of Hanson (U.S. Patent No. 5,956,736) and Rourke (U.S. Patent No. 5,995,721).

(3) the rejection of claim 45 and 57 as being obvious under 35 U.S.C. §103(a) over Motoyama (U.S. Patent No. 5,353,388) in view of Hanson (U.S. Patent No. 5,956,736) and well-known prior art.

(4) the rejection of claim 51 and 63 as being obvious under 35 U.S.C. §103(a) over Motoyama (U.S. Patent No. 5,353,388) in view of Hanson (U.S. Patent No. 5,956,736) and Kato (U.S. Patent No. 5,978,557).

Remarks

Independent Claim 40 will be addressed as representative of independent claim 52, the only other pending independent claim. Claim 40 was rejected under 35 USC §103(a) as allegedly unpatentable over U.S. Patent No. 5,353,388 (Motoyama) in view of U.S. Patent No. 5,956,736 (Hanson). See the second to last paragraph on page 3 of the Examiner's Answer. Appellant respectfully appeals this rejection and submits that independent Claim 40 is patentable over the Motoyama patent and the Hanson patent, taken separately or in any proper combination, for at least the following reasons.

In the field of digital printing, printer operators often receive documents having a variety of different characteristics, such that different portions of the documents often need to be printed by different printing devices. For example, a document may include sections having only black and white text and other sections having color images. The printer operator may need to print the sections having only black and white text with black-and-white printers and the sections having color images with color printers. Although this example is simple, it illustrates the problems associated with compiling a single document having a plurality of different sections that need to be printed by different printers or devices.

The present invention addresses these problems by inserting group identifiers into electronic representations of the documents. The group identifiers establish groups of pages in documents and are used by software to allow a printer operator to selectively print these groups of pages with different printers. In reference to the example provided above, a printer operator may use the group identifiers to print the sections of a document having only black and white text with a black and white printer. The group identifiers also may be used to separately print the sections of the document having color images with a color printer. See, for example, page 13, lines 3-13 and page 16, lines 4-22 of the specification.

Although Claim 40 is not limited to the details of the embodiments discussed above, which are referred to for illustration purposes only, at least the above-cited portions of the specification provide support for Claim 40, which

requires the following. Claim 40 requires a method of operating a print system to print an electronically formatted document having a plurality of pages. The method includes running a Print Document Management System (PDMS) program on a computer, which receives the document into the Print Document Management System program. The method also includes displaying in the PDMS a Graphical User Interface (“GUI”) that permits a print operator to assign group identifiers into the document to establish groups of pages in the document, thereby creating an amended document. Additionally, the method includes instructing the computer to send one or more of the groups of pages of the amended document to an output data stream for printing.

Some important aspects of Claim 40 include the assigning of group identifiers into the document to establish groups of pages in the document, thereby creating an amended document, and the instructing of the computer to send one or more of the groups of pages of the amended document to an output data stream for printing. These features allow a print operator to define a group of pages in a document and then to print one or more of those groups of pages.

The Examiner’s Answer relies upon the Motoyama patent to allegedly teach the bulk of the limitations recited in Claim 40. See the last paragraph of page 3 of the Examiner’s Answer to the first full paragraph of page 5 of the Examiner’s Answer and the first full paragraph on page 15 of the Examiner’s Answer. In essence, Appellant understands the position taken in the Examiner’s Answer to be that the Motoyama patent allegedly teaches the steps of receiving, assigning, and instructing according to Claim 40, but not the performance of such steps by a graphical user interface (“GUI”). For the use of a GUI, the Examiner’s Answer relies upon the Hanson patent. See the first paragraph on page 15 and the first full paragraph on page 16 of the Examiner’s Answer.

To elaborate, Appellant understands the positions taken in the Examiner’s Answer to be that:

- (a) the electronically formatted document according to Claim 40 is allegedly taught by a PDL document according to the Motoyama patent; see page 3, last paragraph of the Examiner’s Answer;

- (b) the print document management system (“PDMS”) according to Claim 40 is allegedly taught by the image processor 150 and its software components 200-210 of the Motoyama patent; see page 3, last paragraph of the Examiner’s Answer;
- (c) the amending of a document by assigning group identifiers into the document according to Claim 40 is allegedly taught by the application program 190 according to the Motoyama patent; see the second full paragraph on page 4 of the Examiner’s Answer;
- (d) the group identifiers according to Claim 40 is allegedly taught by the page sets in Figure 1 of the Motoyama patent; see the last paragraph of page 3 of the Examiner’s Answer; and
- (e) the printing of the groups of pages established by the group identifiers recited in Claim 40 is allegedly taught by the document production instruction manager 310 shown in Figure 6 of the Motoyama patent; see the first full paragraph of page 4 of the Examiner’s Answer.

The Motoyama patent is understood essentially to disclose a page-description language (“PDL”) file format aimed to be an improvement over conventional PDL’s, such as postscript. See column 1, lines 51-63; column 2, lines 37-44; and column 3, lines 49-59 of the Motoyama patent. The PDL file format disclosed by the Motoyama patent is shown in Figure 1A. See column 3, lines 49-52. As shown in Figure 1A, the PDL according to the Motoyama patent divides a single document 100 into a plurality of page sets 104, 106. See column 4, lines 12-13. “Each page set 104 has a prologue 110, body 112 and end 114.” See column 4, lines 14-15. Each page set includes commands, instructions, or other information that is applicable to that page set only. See column 4, lines 47-51.

Figure 3 of the Motoyama patent illustrates how one of these PDL documents is processed and printed. See column 5, line 36 to column 6, line 24. As is common with other PDL documents, the Motoyama patent discloses that an application program 190, such as a word processing program, drawing program, or document assembly program, generates the PDL document and transmits it to an image processor 150 to be processed for printing. See column 5, lines 36-46. Upon receipt of the PDL document, the image processor contains several software

modules 200-210 which process such document for printing. See column 5, line 50-52. A “lexical analyzer and parser 200 identifies each separate element of the document, checks for errors, disposes of document elements which do not need to be processed, and passes the remaining document elements to structure processor 202.” Column 5, lines 52-56.

The structure processor 202, described with respect to Figure 6, includes several software modules that “decode corresponding elements in each prologue section of the document, and store representations of the resulting ‘printing command interpretation environment’ as state parameters.” See column 10, lines 12-24. One such module of the structure processor 202 is a document production manager 310 that processes document production instructions, “such as an instruction to print only pages 7-10 of a document” Column 10, lines 29-34. Thereafter, a document structure manager 300, also a module of the structure processor 202, “uses the stored document production control values to skip over or discard sections of the document corresponding to unselected portions, and to push and pop dictionaries onto the dictionaries stack so as to provide the appropriate dictionaries for each section of the document that is selected for printing.” Column 10, lines 34-40. After processing by the structure processor 202, a content processor 204, an imaging driver module 206, a communication processor 208, and an option processor 210 further facilitate the processing of the PDL document and submission of the processed PDL document to a printer for printing. See Figure 3.

Regarding (a) and (b), above, if the image processor 150 of the Motoyama patent is deemed a PDMS according to Claim 40, and the page sets of the Motoyama patent are deemed group identifiers according to Claim 40, Appellant respectfully submits that the Motoyama patent would then have to teach that the image processor 150 assigns page sets into the PDL document to establish groups of pages in the document to thereby create an amended document. However, Appellant has not found any such teaching or suggestion in the Motoyama patent. In particular, as with other PDL files, the Motoyama patent is understood to teach that an application program 190 generates the PDL file (with the included page sets shown in FIG. 1A) and then submits the generated PDL file to the image processor 150. In other words, the image processor 150 is understood

to receive the PDL file in the format that appears in Figure 1A. See column 5, lines 38-49 of the Motoyama patent. Appellant has not found any teaching or suggestion in the Motoyama patent that, after receipt of the PDL file from the application program 190, the image processor 150 modifies the PDL file received from the application program 190 to insert the page sets shown in Figure 1, as required by Claim 40. Accordingly, Applicants respectfully submit that the Motoyama patent has not been established to teach or suggest the assigning of group identifiers into the document to establish groups of pages in the document to thereby create an amended document, as required by Claim 40.

Regarding (c), above, Appellant respectfully submits that the application program 190 may not be deemed the PDMS according to Claim 40, because Claim 40 requires that receipt of the document must occur prior to display of the document in the GUI, which permits the print operator to assign group identifiers into the document. In this regard, Appellant has not found any teaching or suggestion in the Motoyama patent that the application program 190 receives a PDL document and then subsequently modifies it or amends it by assigning group identifiers into the document.

Regarding (d) and (e), above, Appellant respectfully submits that the page sets according to the Motoyama patent do not teach or suggest the group identifiers according to Claim 40, and that the document production instruction manager 310 of the Motoyama patent does not teach sending one or more of the groups established by the group identifiers to an output stream for printing according to Claim 40. In particular, Appellant respectfully submits that the Motoyama patent does not teach or suggest the sending of one or more of the page sets of an amended document to an output stream for printing.

To elaborate, Appellant respectfully submits that Claim 40 requires sending portions of an amended document based upon the groups of pages established by the group identifiers (“instruct the computer to send one or more of the groups of pages of the amended document to an output stream for printing.”), and that if the page sets according to the Motoyama patent are deemed to teach the groups of pages according to Claim 40, then the Motoyama patent would also have to teach sending portions of the PDL document based upon such page sets for printing. However, the Motoyama patent teaches that the document

production instruction manager 310 is capable of printing certain pages of a document. See column 10, lines 29-34 and Figure 6, 310. For example, the Motoyama patent states that pages 7-10 of a document could be printed. See column 10, lines 29-34 and Figure 6, 310. Appellant respectfully submits that the identification of certain pages in a document is not the teaching of printing based on particular page sets 104, 106 shown in Figure 1A. In other words, Appellant has not found any teaching or suggestion in the Motoyama patent that the page sets 104, 106 correlate to the particular pages (e.g., pages 7-10) to be printed as defined at column 10, lines 34-40 and shown in Figure 6, 310 of the Motoyama patent. Accordingly, Appellant respectfully submits that the Motoyama patent does not teach or suggest sending portions of an amended PDL document based upon the page sets established by group identifiers, as required by Claim 40.

The Hanson patent as referred to at the second to last paragraph on of page 4 in the Examiner's Answer, is alleged to disclose a GUI that is used to open and thus receive a document; assign identifiers in the document, and therefore create an amended document; and instruct a computer to output the document data. Although Appellant does not concede that this characterization of the Hanson patent is correct, Appellant submits that even if such characterization is deemed correct, it is not disclosed to teach, specifically assigning identifiers into the document to establish groups of pages in the document to thereby create an amended document and instruct a computer to send one or more of the groups of pages of the amended document to an output stream for printing.

Further, the Hanson et al. patent is understood to disclose an HTML editor for creating web documents to be published on the worldwide web. See the abstract. The position taken in the Examiner's Answer is understood to be that the Hanson et al. patent discloses a GUI that receives document data and assigns identifiers in the document and therefore creates an amended document. Although this may be true, Claim 40 is not as general as this construction recited at the second-to-last paragraph of page 4 of the Examiner's Answer. In particular, Claim 40 requires more than the assigning of identifiers in a document, but requires the assigning of group identifiers into a document to establish groups of pages. Appellant respectfully submits that the position taken in the Examiner's

Amendment does not point out disclosure in the Hanson patent that specifically teaches such group identifiers according to Claim 40.

Further, it is the position taken in the Examiner's Answer that the Hanson et al. patent allegedly discloses the instruction of a computer to output document data. However, Claim 40 is not as general as this characterization. In particular, Claim 40 does not just require instruction of a computer to output document data but requires the instruction of a computer to send one or more of the groups of pages, which had been established by the group identifiers in the amended document to an output data stream for printing. Appellant respectfully submits that the position taken in the Examiner's Answer has not established these specifics of Claim 40.

Since neither the Motoyama patent nor the Hanson patent are believed to teach or suggest the features of Claim 40 alone or in any proper combination, Appellant respectfully submits that a proper §103(a) rejection has not been made, and its reversal is respectfully requested.

Finally, the Examiner's Answer states, "Motoyama and Hanson are combinable because they are from the same field of endeavor, namely digital document data processing The motivation for doing so would have been to allow a user to modify the contents of the document and the manner in which said document is printed (column 4, lines 34-39 of Hanson)." Pages 4-5 of the Examiner's Answer. The cited portion of Hanson states, "Each one of the objects in the collection of objects may be edited by way of a context sensitive object editor to customize the Web document. An object is selected by an input device and dragged to an object editor window, where the properties associated with the object are displayed and may be modified." In view of these statements, Appellant understands the position taken by the Examiner's Answer to be that because the Hanson et al. patent teaches a GUI that modifies a document, whether it be an HTML document or any other kind of electronic document that may be printed, it is combinable with the teachings of the Motoyama patent.

Notwithstanding Appellant's position that even if such patents were combined, the limitations of Claim 40 are not taught, Appellant further submits that the reasons provided for combining the Hanson et al. patent and the Motoyama patent are insufficient. In particular, web document editing disclosed

by the Hanson et al. patent is respectfully submitted to be akin to the application program 190 of the Motoyama patent. For example, a user may generate a web page according to the teachings of the Hanson et al. patent, and then submit it for printing. After submission for printing, the web document editing application of the Hanson et al. patent could be modified to generate a PDL output stream of the format of FIG. 1A of the Motoyama patent for printing. However, because the Motoyama patent does not teach or suggest editing of such PDL document to include group identifiers after it is submitted by the application program 190 to the image processor 150, Appellant respectfully submits that the teachings of the Hanson et al. patent are not combinable with the Motoyama patent to teach Claim 40. Further, if it is the position of the Examiner's Answer that group identifiers are taught to be inserted into a web page prior to being converted to the PDL document and prior to submission to the image processor 150, Appellant has not found any teaching or suggestion in the Hanson et al. patent that such group identifiers are inserted into its web pages. Further, because web pages conventionally are not paginated according to printer pages, Appellant respectfully submits that it would be counter-intuitive to insert group identifiers according to Claim 40 into web pages. For at least these reasons, Appellant submits that proper motivation to combine the Hanson et al. patent and the Motoyama patent has not been established.

In summary, Appellant respectfully submits that neither the Hanson et al. patent or the Motoyama patent teach the assigning of group identifiers into a document to establish groups of pages in a document to thereby create an amended document and instruct the computer to send one or more of the groups of pages of the amended document to an output stream for printing. Further, Appellant respectfully submits that proper motivation to combine the Hanson et al. patent and the Motoyama patent has not been established. Accordingly, reversal of the Section 103(a) rejection of Claim 40 is respectfully requested.

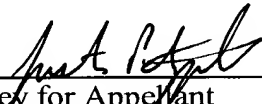
Independent Claim 52 is submitted to include the same or similar features discussed above in connection with Claim 40 and is submitted to be patentable for at least the same reasons. Therefore, reversal of its §103(a) rejection is respectfully requested. The remaining claims depend from one of the

independent claims discussed above and are submitted to be patentable for at least the same reasons. Accordingly, reversal of their §103(a) rejections also is respectfully requested.

No fees are believed due for the present Reply Brief. If, however, fees are due, then the Commissioner is authorized to charge the requisite petition fee to Deposit Account 05-0225.

Respectfully submitted,

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585)477-4656.